

## Test of the Picoboard on Pi4 with Scratch 1.4

Same connexions as test with Scratch 3.

Launch Scratch 1.4 the sensors are present in the sensor zone (slider + button pressed ?)

Here the 2 LEDs Rx and Tx of the board are on when i click on green flag.

Test program work (change cat size with slider)

## Test of the PicoBoard on Pi4 with Scratch 3

### Material

- Pi4 4Go / fan
- SDCard 16Go with Raspbian Stretch install of last version + update
- Install Scratch3 from <https://github.com/MrYsLab/s3onegpio/tree/gh-pages> + oneGPIO s3-extend in Python

### Start

Connect on Pi4 connectors before supply

- Kbd Dell
- Mouse Genius wireless
- Ethernet wire
- Vidéo outpu HDMI0
- PicoBoard on USB2 port

### Power Supply

Launch s3 server

```
pi@raspberrypi:~ $ s3p
backplane started
Websocket Gateway started
Picoboard Gateway started
To exit this program, press Control-c
```

LEDs Rx and Tx of the PicoBoard are on

### Backplane

```
pi@raspberrypi:~ $ backplane
```

```
*****
```

```
Backplane IP address: 192.168.1.35
```

```
Subscriber Port = 43125
```

```
Publisher Port = 43124
```

```
Loop Time = 0.001 seconds
```

```
*****
```

```
Traceback (most recent call last):
```

```
File "/usr/local/bin/backplane", line 8, in <module>
```

```
sys.exit(bp())
File "/usr/local/lib/python3.7/dist-
packages/python_banyan/backplane/backplane.py", line 166, in bp
    backplane = BackPlane(**kw_options)
File "/usr/local/lib/python3.7/dist-
packages/python_banyan/backplane/backplane.py", line 89, in __init__
    self.publish_to_bp.bind(bind_string)
File "zmq/backend/cython/socket.pyx", line 547, in
zmq.backend.cython.socket.Socket.bind
File "zmq/backend/cython/checkrc.pxd", line 25, in
zmq.backend.cython.checkrc._check_rc
zmq.error.ZMQError: Address already in use
```

### **pbgw**

```
pi@raspberrypi:~ $ pbgw
```

```
*****
PicoboardGateway using Back Plane IP address: 192.168.1.35
Subscriber Port = 43125
Publisher Port = 43124
Loop Time = 0.1 seconds
*****
Looking for picoboard on: /dev/ttyUSB0
picoboard found on: /dev/ttyUSB0
```

### **wsgw -i 9004**

```
pi@raspberrypi:~ $ wsgw -i 9004
```

```
*****
WebSocket Gateway using Back Plane IP address: 192.168.1.35
Subscriber Port = 43125
Publisher Port = 43124
*****
WebSocket using: 192.168.1.35:9004
Traceback (most recent call last):
  File "/usr/local/bin/wsgw", line 8, in <module>
    sys.exit(ws_gateway())
  File "/usr/local/lib/python3.7/dist-
packages/s3_extend/gateways/ws_gateway.py", line 283, in ws_gateway
    WsGateway(subscription_list, **kw_options, event_loop=loop)
  File "/usr/local/lib/python3.7/dist-
packages/s3_extend/gateways/ws_gateway.py", line 98, in __init__
    self.event_loop.run_until_complete(self.start_server)
  File "/usr/lib/python3.7/asyncio/base_events.py", line 584, in
run_until_complete
    return future.result()
```

```
File "/usr/lib/python3.7/asyncio/tasks.py", line 603, in
_wrap_awaitable
    return (yield from awaitable.__await__())
File "/usr/local/lib/python3.7/dist-
packages/websockets/server.py", line 965, in __await_impl__
    server = await self._create_server()
File "/usr/lib/python3.7/asyncio/base_events.py", line 1378, in
create_server
    % (sa, err.strerror.lower())) from None
OSError: [Errno 98] error while attempting to bind on address
('0.0.0.0', 9004): address already in use
```

When i move the slider the 2 LEDs Rx and Tx go off (no light) and the cat's size do not change